Figure 1

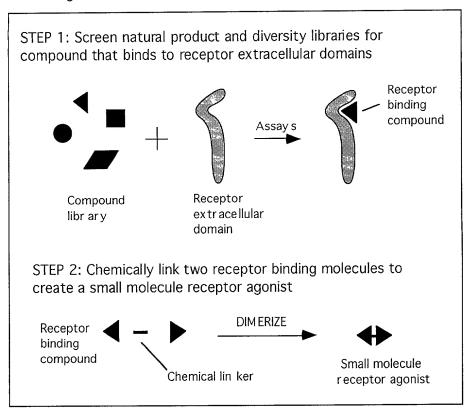
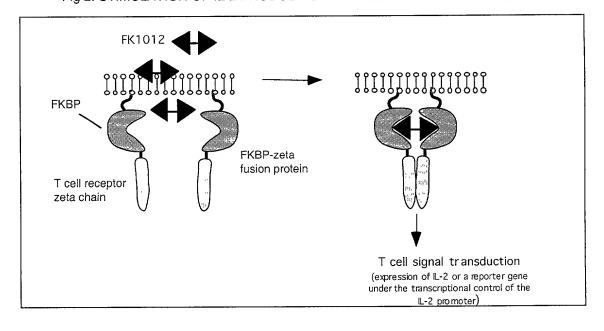


Fig 2: STIMULATION OF IL-2 PRODUCTION BY A SMALL MOLECULE DIMERIZER



Receptor domain

TCR zeta domain

Activation of intracellular processes

Fig 3: STIMULATION OF ERYTHROPOLETIN RECEPTOR BY A SMALL MOLECULE

Fig 4: IDENTIFICATION OF RECEPTOR BINDING COMPOUNDS USING A COMPETITIVE LIGAND BINDING ASSAY

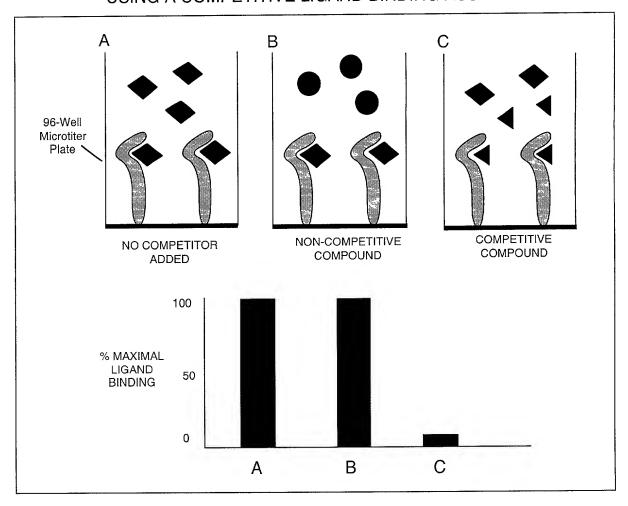
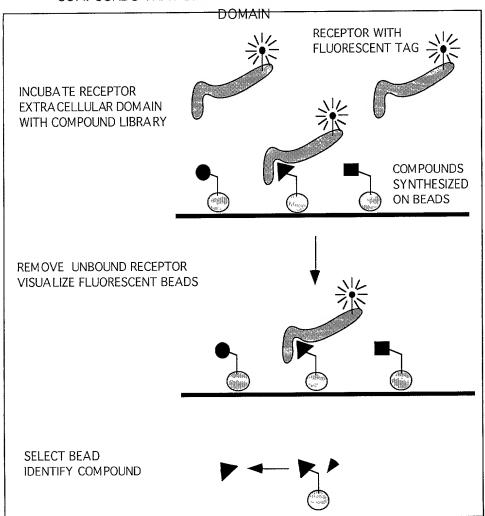


Fig 5: SCREENING MOLECULAR DIVERSITY LIBRARIES FOR COMPOUNDS THAT BIND TO A RECEPTOR EXTRACELLULAR



Erythropoietin receptor extracellular domain

T cell receptor zeta subunit intracellular domain

Signal transduction (IL-2 production)

Fig 6: EPO STIMULATES SIGNAL TRANSDUCTION IN AN ENGINEERED CELL LINE

SMALL MOLECULE BLOCKS EPO RECEPTOR-MEDIATED SIGNAL TRANSDUCTION

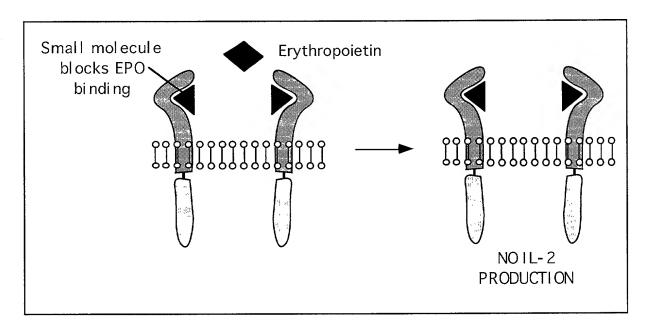
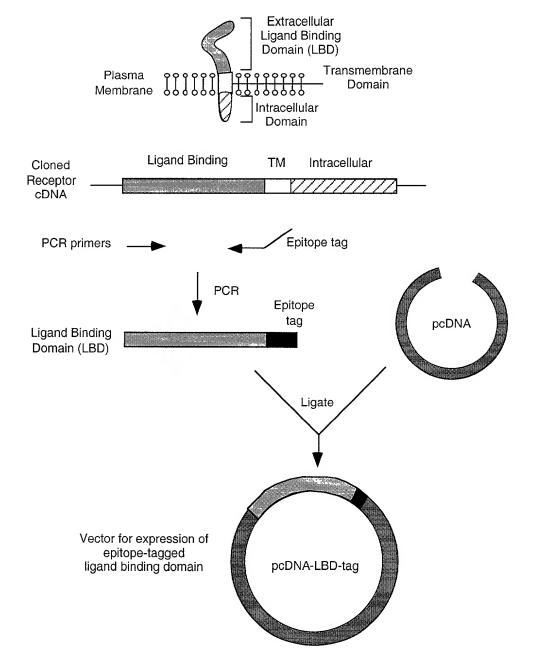


Fig 7: General Method For Construction of Expression Vector for Production of Ligand Binding Domain



The receptor binding domain can be identified by inspection of the receptor coding sequence (e.g. Kyte-D oolittle analysis) or by analysis of deletion mutants (see Watowich et al, Mol. Cell. Bi ol. 14:3535 1994). PCR primers flanking the LBD are used to PCR amplify the region encoding the LBD. By inclusion of sequences encoding a particular epitope in on or the other PCR primer, an epitope can be fused to the N- or C-terminus of the LBD. Other PCR primers can be used to introduce restriction sites into the ends of the LBD coding sequence to facilitate cloning. The cloned LBD is then ligated into an appropriate expression vector, such as the pcDNA series from Invitrogen, Inc. for mammalian cell expression. To express a receptor-immunoglobulin fusion protein, the amplifed LBD segment is ligated into an expression vector containing the hinge, CH2 and CH3 domains of an IgG heavy chain as described in Ashkenazi et al PNAS 88:10535 1991. See e.g., Nature 330, 537-543 (1987) for details relevant to GH receptor.